ANALYZING DATA FOR CONTINUOUS SCHOOL IMPROVEMENT PLANNING
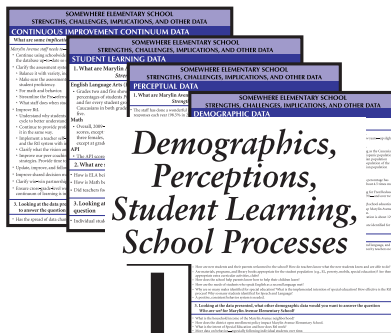
Where Are We Now?

Answering this question is the part of continuous school improvement planning that takes a comprehensive and honest look at all the school's data—not just student learning results—and helps to reflect on how the data implications intersect. There are four sub-questions to answer with data within this category:

♦ Who are we?

♦ How do we do business?

♦ How are our students doing?

♦ What are our programs and processes?

After analyzing each of the four types of data in terms of strengths, challenges, and implications, we can look across implications to understand the common and systemic implications for the continuous school improvement (CSI) plan.

Strengths, Challenges, Implications, and Other Data

Demographics, Perceptions, Student Learning, School Processes

Part 1— Comprehensive Data Analysis to School Improvement Implementation

Look for Implication Commonalities

Aggregate Implications for the Continuous School Improvement Plan

Purpose   The purpose of this activity is to guide the analysis of data to inform the school vision and continuous school improvement plan.

Target Audience   School staff.

Time   Up to three hours, depending upon the number of staff members and the amount of data available.

Materials   Chart paper, markers, tape, or push pins to post the chart paper, if necessary. Have the school's data profile printed on paper, or available on technology devices, so each staff member can review the data.

Process Protocol

Step 1. Strengths, Challenges, Implications. Print a *Strengths, Challenges,* and *Implications* worksheet for each staff member (Figures H-1 through H-6).

As individuals, review independently each type of data (e.g., *demographics, perceptions, student learning,* and *school processes*), done separately, have them document what they are seeing as—

♦ *strengths,*

♦ *challenges,*

♦ *implications for the continuous school improvement plan,* and

♦ *other data they wished the school had.*

Note: Analyses are much richer if notes about the data are jotted down *as* they are reviewed. **(15-20 minutes)**

DEMOGRAPHIC DATA

1. What are Somewhere School's demographic *strengths* and *challenges?*	
Strengths	*Challenges*
• Somewhere School is a diverse, medium-size school serving grades K-5. • Grade-level enrollments seem to be relatively steady, although decreasing in upper grades. • The mobility rate is down from a couple of years	• There is declining districtwide enrollment in the last few years-up slightly in 2012-13. • Somewhere School is experiencing declining enrollment. • Many different ethnicities are increasing as the Caucasian student population is decreasing. In the school, the Hispanic population has increased from
2. What are some *implications* for the Somewhere continuous school improvement plan?	
• Are teachers prepared to teach the changing population? Do teachers know how to teach students with English as a second language, and those who live in poverty? What are the implications of teaching students living in poverty? (Perhaps more male and minority teachers need to be recruited?) • How are class-size issues dealt with, with mobility	
3. Looking at the data presented, what other demographic data would you want to answer the question *Who are we?* for Somewhere Elementary School?	
• How does the district open enrollment policy impact Somewhere Elementary School-and in comparison to the other elementary schools? • What is the intent of Special Education? • How does RtI work? • More data on behavior-especially following individual students dynamically and over time.	

DEFINITIONS

Strengths: Something positive that can be seen in the data. Often leverage for improving a challenge.

Challenges: Data that imply something might need attention, a potential undesirable result, or something out of a school's control.

Implications for the Continuous School Improvement Plan are placeholders until all the data are analyzed. Implications are thoughts to not forget to address in the school improvement plan. Implications most often result from challenges.

In small groups, have staff members share what they see as *strengths, challenges, implications for the continuous school improvement plan,* and *other data they wished the school had.* Record commonalities on chart paper. (This makes it easier to combine the small-groups' thinking with full-group thinking in the next step.) **(15 minutes)**

Combine the small group results to get a comprehensive *set of strengths, challenges, implications for the continuous school improvement plan,* and *other data you wished the school had.* This is best done by having a reporter from each small group stand beside her/his group's chart paper ready to mark off items mentioned as each group's reporter indicates what the group saw as *strengths, challenges, implications for the continuous school improvement plan,* and *other data you wished the school had.*

Start on the left and have the first reporter read all the group's strengths. Other reporters check off common elements on their lists. Going to the right, the next reporter reads only what her/his group had on its "strengths" list that has not been read. Continue until all the "strengths" have been read. Have another group read its list of "challenges". You might want to start on the right this time, and go left. Continue with "implications for the school improvement plan," and then "what other data do you wish you had," until you are finished. The result will be a comprehensive list of *Strengths, Challenges, Implications for the school improvement plan,* and *Other Data You Wished the School Had.* **(20 minutes)**

Process Protocol *(Continued)*

Repeat the process with the other three types of data.

Process options: The process described above is an excellent way to review and combine thinking with demographic data. It is important that all staff members review all the information in at least one area of data.

With perceptions and student learning data, parts of the data work could be delegated to different members of each small group. For example, when a school has student, staff, and parent questionnaires to analyze, one third of each team could review the student questionnaire; another third, the staff questionnaire; and another third, the parent questionnaire. The sub-teams could then report what they saw in the data to their team, who then will combine their thinking with the other teams. With student learning, the data analysis could be delegated by subject area. With process data, divide staff into groups to complete measuring program and processes table for major programs and processes. Your school may also want to use the *Continuous Improvement Continuums* (CICs) to self-assess the entire school.

Step 2. **Implications Across the Data.** After staff members have documented the school's data strengths, challenges, implications for the continuous school improvement plan, and what other data they wished the school had for *demographics, perceptions, student learning, school processes,* review the implications side-by-side.

This alignment is important for seeing commonalities across the different implications (partial example shown below).

Step 3. **Implication Commonalities.** In small groups, look across and highlight commonalities in your *demographics, perceptions, student learning,* and *school process implications.* Share small group thinking with the large group (partial example shown on the following page).

REVIEW IMPLICATIONS ACROSS DATA			
DEMOGRAPHICS	**STUDENT, STAFF, PARENT QUESTIONNAIRES**	**STUDENT LEARNING**	**PROCESS DATA**

• Are teachers prepared to teach the changing population? Do teachers know how to teach students with English as a second language, and those who live in poverty? What are the implications of teaching students living in poverty? (Perhaps more male and minority teachers need to be recruited?)
• How are class-size issues dealt with, with mobility?
• Does the school know why the mobility rate is high, and where students go? Do students stay in the district?
• How are new students and their parents welcomed to the school? How do teachers know what the new students know and are able to do?
• Are materials, programs, and library books appropriate for the student population (e.g., EL, poverty, mobile, special education)? Are there appropriate extra-curricular activities, clubs?
• How does the school help parents know how to help their children learn?
• How are the needs of students who speak English as a second language met? Is there a need for an English Language Development program?
• Why are so many males identified for special education? What is the implemented intention of special education? How effective is the RtI process? Why are so many students identified for Speech and Language?
• A positive, consistent behavior system is needed. Parents need to be a part of the behavior system.
• Instructional assistants, recess and lunch supervisors need professional development in the behavior system.
	• Someone should follow-up on the lowest scoring items (K-1)—*The work I do in class makes me think, Students at my school are friendly, I have lots of friends- even though they are still high.*
	• The lowest items on the grades 2-5 questionnaire are related to students treating each other with respect and being friendly, having freedom and choices at school, and being challenged by the work my teacher asks me to do.
	• The school personnel might need professional development in behavior/respect and diversity issues, and how they give students freedom and choices.
	• Communication and shared leadership need to improve.
	• Enrichment in learning.
		• How is ELA being taught? How is ELA being measured on an ongoing basis?
		• How is Math being taught? How is Math being measured on an ongoing basis?
		• Did teachers focus too much on the students not proficient? Do all teachers know what to do when students are proficient?
		• We need stronger core instruction for all students.
			Somewhere School staff need to—
			• Continue using schoolwide data as they have in the past to help them know how the system is doing. Get and keep the database up-to-date so staff can gauge progress.
			• Clarify the assessment system to measure the attainment of the Common Core State Standards (CCSS).
			  * Balance it with variety, including performance assessments and student self-assessments.
			  * Make sure the assessments that are used are telling them what they need to hear to know how to ensure student proficiency.
			  * For math and behavior.
			  * Streamline the pre-referral process, especially the form completion process.
			  * What staff does when students are proficient on benchmarks.
			• Improve RtI:
			  * Understand why students who have been through interventions are not proficient. Do a problem-solving cycle to better understand.
			  * Continue to provide professional development for all staff so everyone can understand it and implement it in the same way.
			  * Implement a teacher self-assessment and grade level self assessment system to help implement the vision and the RtI system with integrity and fidelity throughout the school. Identify internal quality measures.
			  * Clarify what the vision and RtI would look like when implemented.
			  * Improve our peer coaching system: support and provide guidance for new instruction and assessment strategies. Provide time to develop new skills and improve level 1.
			• Update, improve, and follow the school improvement plan.
			• Improve shared decision making and leadership: Define, implement, and communicate.
			• Clarify win-win partnerships with parents. Make sure parents know the vision and mission of the school, and learning expectations for their children.
			• Ensure cross-grade-level work improves to implement the standards, vision, and RtI consistently, and to also ensure that a continuum of learning makes sense for all students.

HIGHLIGHT IMPLICATION COMMONALITIES

DEMOGRAPHICS	STUDENT, STAFF, PARENT QUESTIONNAIRES	STUDENT LEARNING	PROCESS DATA

• Are teachers prepared to teach the changing population? Do teachers know how to teach students with English as a second language, and those who live in poverty? What are the implications of teaching students living in poverty? (Perhaps more male and minority teachers need to be recruited?)
• How are class-size issues dealt with, with mobility?
• Does the school know why the mobility rate is high, and where students go? Do students stay in the district?
• How are new students and their parents welcomed to the school? How do teachers know what the new students know and are able to do?
• Are materials, programs, and library books appropriate for the student population (e.g., EL, poverty, mobile, special education), and for getting students college and career ready? Are there appropriate extra-curricular activities, clubs?
• How does the school help parents know how to help their children learn?
• How are the needs of students who speak English as a second language met? Is there a need for an English Language Development program?
• Why are so many males identified for special education? What is the implemented intention of special education? How effective is the RtI process? Why are so many students identified for Speech and Language?
• A positive, consistent behavior system is needed. Parents need to be a part of the behavior system.
• Instructional assistants, recess and lunch supervisors need professional development in the behavior system.
	• Someone should follow-up on the lowest scoring items (K-1)—*The work I do in class makes me think, Students at my school are friendly, I have lots of friends- even though they are still high.*
	• The school personnel might need professional development in behavior/respect and diversity issues, and how they give students freedom and choices.
	• Communication and shared leadership need to improve.
	• Enrichment in learning.
		• How is ELA being taught? How is ELA being measured on an ongoing basis?
		• How is Math being taught? How is Math being measured on an ongoing basis?
		• Did teachers focus too much on the students not proficient? Do all teachers know what to do when students are proficient?
		• We need stronger core instruction for all students.
			Somewhere School staff need to—
			• Continue using schoolwide data as they have in the past to help them know how the system is doing. Get and keep the database up-to-date so staff can gauge progress.
			• Clarify the assessment system to measure the attainment of the Common Core State Standards.
			   * Balance it with variety, including performance assessments and student self-assessments.
			   * Make sure the assessments that are used are telling them what they need to hear to know how to ensure student proficiency.
			   * For math and behavior.
			   * Streamline the pre-referral process, especially the form completion process.
			   * What staff do when students are proficient on benchmarks.
			• Improve RtI:
			   * Understand why students who have been through interventions are not proficient. Problem-solving cycle can guide this.
			   * Continue to provide professional development on RtI for all staff so everyone can understand it and implement it in the same way.
			   * Implement a teacher self-assessment and grade-level self-assessment system to help implement the vision and the RtI system with integrity and fidelity throughout the school. Identify internal quality measures.
			   * Clarify what the vision and RtI would look like when implemented.
			   * Improve the peer coaching system: support and provide guidance for new instruction and assessment strategies. Provide time to develop new skills and improve Level 1.
			• Update, improve, and follow the continuous school improvement plan.
			• Improve shared decision making and leadership: Define, implement, and communicate.
			• Clarify win-win partnerships with parents. Make sure parents know the vision and mission of the school, and learning expectations for their children.
			• Ensure cross-grade-level work improves to implement the standards, vision, and RtI consistently, and to also ensure that a continuum of learning makes sense for all students.

Process Protocol *(Continued)*

Step 4. Aggregate Implications for the Continuous School Improvement Plan. In small groups, or in the large group, if manageable, stand back from the *implication commonalities* and begin a bulleted list of *implications for the plan,* with respect to *leadership, curriculum, instruction, assessment, curriculum, standards, vision/plan, etc.* Use the provided template (Figure H-6), which can be adjusted as needed. (Partial example shown below.) Staff members will be answering the question, *What do the data tell us has to be included in our continuous school improvement plan?*

AGGREGATED IMPLICATIONS FOR THE CONTINUOUS SCHOOL IMPROVEMENT PLAN

INSTRUCTION	ASSESSMENT	CURRICULUM	BEHAVIOR	VISION / PLAN	PROFESSIONAL LEARNING
• Teachers need to strengthen their instructional strategies in ELA, Math, Science, and Social Studies. • There needs to be deeper implementation of RtI. • Continue to ensure that all teachers are teaching to standards and all students are meeting Common Core State Standards (CCSS) in all subject areas. • Clarify what staff do when students are proficient.	• Clarify a balanced assessment system. • We need to make sure teachers know what the new students know and are able to do when they arrive, so we do not lose instructional time. • We need to collect more systematic formative data in all subject areas.	• Are materials, programs, and library books appropriate for the student population? (EL, poverty, mobile, special education) • Will all materials, etc., help us implement the Common Core State Standards (CCSS)? • We need to document and continue to improve RtI implementation.	• We need a positive, consistent behavior system schoolwide. • We need to set-up dynamic data collection for behavior, monitor it, and change as needed.	• The vision needs to be fully implemented. • Staff need to stay focused on the plan; always have next steps in front of them; create and post a graphic organizer to help us stay focused. • We need to systematically include our parents in quality planning.	• Continue our professional learning in meeting the needs of our students, especially students with English as a second language, those who live in poverty, and males, specifically in ELA and Math learning, for RtI, and for implementing the Common Core State Standards (CCSS). • School personnel need consistent training and implementation of behavior and motivation strategies.

COLLABORATION	LEADERSHIP	PARTNERSHIPS	DATA	CLIMATE	RtI / SPECIAL EDUCATION
• Staff need to strengthen peer coaching and make it and the feedback structure more systematic and defined. • We need to schedule schoolwide articulation more often and make cross-grade-level articulation meetings more systematic. • Staff need to continue cross-grade-level articulation, including agreements about student behavior in terms of motivation, attitude, and effort-also as related to *Students Committed to Excellence.*	• Communication needs to improve among staff and with parents. • Everyone needs to be a part of professional learning and leadership. • We need to improve shared leadership.	• We need to connect student achievement data to partnerships, and look into relationships that might affect student achievement, based on our mission/vision/ plan. • We need to document different ways the community is contributing to the school, and how parent involvement affects student achievement. • We need to make sure parents know how to help meet the learning needs of their children.	• Where do our mobile students go? Do they stay in the district? • We need to gather and monitor behavior data regularly. • We need to continue using schoolwide data teams. • Staff need to become astute in knowing what works so they can predict and ensure successes. • Staff accessibility to data tools needs to be improved.	• We need a system to welcome new students and their parents to the school. • Staff need to continue cross-grade-level articulation, including agreements about student behavior in terms of motivation, attitude, and effort-also as related to *Students Committed to Excellence.* • Staff need to continue to communicate and collaborate.	We need to: • Look into speech and language referrals. • Streamline PRT process. • Get all staff understanding RtI in the same way. • Strengthen core curriculum. • Evaluate and improve RtI implementation. **COMMON CORE STATE STANDARDS** • Continue to learn more about teaching and assessing the Common Core State Standards (CCSS).

Process Protocol *(Continued)*

Step 5. Create the Plan. Use this comprehensive data analysis, along with the vision, to create the continuous school improvement plan.

Comments to the Facilitator

This is an activity to ensure the analysis of all types of comprehensive schoolwide data, to engage all staff members in analyzing the data, and to reach consensus on data implications for the continuous school improvement plan. The important concepts are to have participants:

♦ Review the data independently, writing as they analyze the data.

♦ Combine thinking of staff members.

♦ Look across the different implication analyses to paint with a broad brush.

♦ Create a list of implications for the continuous school improvement plan.

Figure H-1
STRENGTHS, CHALLENGES, IMPLICATIONS FOR ANALYZING DEMOGRAPHIC DATA

Use the template below to record your thinking *as you review* your demographic data. Also use these questions for moving individual thoughts to small-group thinking, and then to whole-group thinking.

DEMOGRAPHIC DATA	
1. What are the school's demographic *strengths* and *challenges?*	
Strengths	*Challenges*

2. What are some *implications* for the continuous school improvement plan?

3. Looking at the data presented, what other demographic data would you want to answer the question
   Who are we?

Figure H-2
TABLE FOR ANALYZING PERCEPTIONS DATA

Perceptions data are important for continuous school improvement planning because they reveal what students, staff, and parents are thinking about the learning environment. Since humans cannot act differently from what they value, believe, or perceive, it is important to know what each constituency is perceiving about the learning environment to assist with knowing what to change to create a learning environment that everyone perceives as helpful. You may also choose to analyze your perceptions data results using strengths, challenges, and implications (Figure H-1).

	Student Questionnaire	Staff Questionnaire	Parent Questionnaire	Agreements Across Questionnaires	Disagreements Across Questionnaires
General feel of questionnaire (positive, neutral, negative)					
Most positive items					
Neutral items					
Negative items					
On which items are there differences in subgroups? (i.e., disaggregated responses)					
Implications for the Continuous School Improvement Plan					

Figure H-3
STRENGTHS, CHALLENGES, IMPLICATIONS FOR ANALYZING SCHOOL PROCESSES DATA

Use the template below to record your thinking *as you review* your school processes data. Also use this for moving individual thoughts to small-group thinking, and then to whole-group thinking.

SCHOOL PROCESSES DATA
1. What are the *strengths* and *challenges* of the school processes?

Strengths	*Challenges*

2. What are some *implications* for the continuous school improvement plan?

3. Looking at the data presented, what other school process data would you want to answer the question *What are our programs and processes?*

Figure H-4
STRENGTHS, CHALLENGES, IMPLICATIONS FOR ANALYZING STUDENT LEARNING DATA

Use the template below to record your thinking *as you review* your student learning data. Also use this for moving individual thoughts to small-group thinking, and then to whole-group thinking.

STUDENT LEARNING DATA	
1. What are the school's student learning *strengths* and *challenges?*	
Strengths	*Challenges*

2. What are some *implications* for the continuous school improvement plan?

3. Looking at the data presented, what other student learning data would you want to answer the question *How are our students doing?*

Figure H-5
LOOK FOR IMPLICATIONS COMMONALITIES

Use this template to look across the implications for the four types of data. Highlight the common implications across the types of data.

Demographics	Student, Staff, Parent Questionnaires	School Processes	Student Learning

Figure H-6
AGGREGATE IMPLICATIONS FOR THE CONTINUOUS SCHOOL IMPROVEMENT PLAN

Use this template to list implications for the continuous school improvement plan, by major concepts. The headers you see in this template can be changed to reflect your needs.

INSTRUCTION	ASSESSMENT	CURRICULUM	BEHAVIOR	VISION / PLAN	PROFESSIONAL LEARNING
COLLABORATION	LEADERSHIP	PARTNERSHIPS	DATA	CLIMATE	RtI